ENVIRONMENTAL ASSESSMENT Case File No.: AA-85628 AK-040-04-EA-036

Applicant: GEOCOM RESOURCES INC

11401 Olive Lane

Anchorage, Alaska 99515

Type of Action: Land Use Application and Permit (Form 2920-1)

Location: Seward Meridian,

T. 9 S., R. 44 W.

Sec. 3, S½; Sec. 23, SE¼; Sec. 26, W½; Sec. 27, №2.

Prepared By: Dave Kelley, Natural Resource Specialist

Preparing Office: Bureau of Land Management

Anchorage Field Office 6881 Abbott Loop Rd. Anchorage, Alaska 99507

Date: August 31, 2004

I. INTRODUCTION:

GEOCOM Resources Inc., an American company, and its partners TNR Gold Corp. and BHP-Biliton Minerals, propose to conduct geophysical exploration using a core drill to further evaluate the gold/copper mineralization on their claims, 25 miles west of Lake Iliamna, Alaska. Earlier this year a 2920 permit (AA-82369) was issued in this area.

A. Purpose and Need for the Proposed Action:

GEOCOM Resources Inc proposes to core drill to gather samples to further evaluate the gold/copper mineralization on their state selected lands midway between Lake Iliamna and Ekwok, Alaska.

B. Conformance with Land Use Plan:

No land use plan exists for this area. However, this environmental analysis assesses the impacts of the proposed action and provides a basis for a decision on the proposal (43 CFR 1610.8 (b)(1).

C. <u>Relationship to Statutes, Regulations, Policies, Plans or Other Environmental</u> Analyses:

The lands have been selected by the State of Alaska. A letter of non-objection has been received from the Department of Natural Resources.

II. PROPOSED ACTION AND ALTERNATIVE

A. Proposed Action:

GEOCOM Resources Inc. proposes to explore using a core drill to gather samples to further evaluate the gold/copper mineralization on state selected lands midway between Lake Iliamna and Ekwok, Alaska. The land is located in the Seward Meridian, T. 9 S., R. 44 W., Sections 3, 23, 26, and 27 (see attached maps).

Geocom has identified eight potential drilling locations. They only intend to drill four holes at locations 1 thru 4 (see the attached map); unless results or conditions require moving to one of the other identified alternative locations. The drill and other equipment will be moved entirely by helicopter. The drill will be supported by a 10x10 foot timber pad that will be leveled using shims. No vegetation will be removed at the drill site. Each drill site will require a space approximately 30 feet by 30 feet in size to accommodate crew movement, helicopter landing, a 40 gallon fuel drum within an "Overpack" fuel spill protection storage container and mud tanks with associated equipment. GEOCOM will place the fuel barrel(s) and fuel pump equipment within a visqueen lined impermeable spill control impoundment to contain any spills. Spill specific response kits will be available on site. A Longyear 38 drill with a 3" (HQ) or 2.1" (NQ) diameter drill bit will be used. The maximum drill hole depth is estimated to be 250 meters

(approximately 850 feet). Drilling mud will be contained in metal mud tanks. Drilling will be accomplished using only water and bentonite clay as a drill hole stabilizer. Water will be drawn from nearby small lakes and streams. Drill cuttings and drill mud will be used to fill the drill hole, which will then be plugged. Excess cuttings and mud will be dispersed around the drill site, leaving no visible piles of cuttings. Drilling will require about 4 days at each site.

GEOCOM Resources Inc. will have their base camp located in Igiugig. There will be no camp set up at the drilling sites. Core samples and personnel will be flown out daily. This project will commence as soon as possible and will take no more than one month to complete.

B. No Action Alternative:

The No Action Alternative would be to deny this application.

III. AFFECTED ENVIRONMENT

A. Critical Elements:

The following critical elements of the human environment have been analyzed and are either not present or will not be affected by the Proposed Action or the No Action Alternative.

Air Quality
Areas of Critical Environmental Concern
Environmental Justice
Farmlands (Prime or Unique)
Flood plains
Invasive, Non-native Species
Native American Religious Concerns
Threatened and Endangered (T&E) Species
Water Quality (Surface/Ground)
Wild and Scenic Rivers
Wilderness

1. <u>Cultural Resources</u>:

No cultural resources are known for this project area. No further consultation is necessary under Section 106 of the National Historic Preservation Act.

2. Subsistence - ANILCA Section 810 Clearance:

Active subsistence harvest activities of caribou, waterfowl, moose, and fish occur in the area during the proposed period of activity.

3. Wastes, Hazardous/Solid:

There are no known hazardous wastes at the site.

4. Wetlands/Riparian Zones:

The area of the Proposed Action encompasses numerous lakes, tundra ponds and hydrologically interconnected wet tundra/bog complexes, water bodies and streams.

B. Land Status:

The land is selected by the State of Alaska. The State of Alaska, Department of Natural Resources issued a concurrence in accordance with Section 906(k) of the Alaska National Interest Lands Conservation Act (ANILCA), on August 20, 2004.

C. Recreation:

Hunting season is open for several species including the caribou, moose, brown bear, waterfowl and upland game birds during the months of August, September and October. Hunters will be using the area during this period of time. Hunting parties and guiding operations will be using low flying aircraft for transporting hunters and supplies to hunting camps.

D. Visual Resources:

Using the BLM's Scenic Quality Inventory and Evaluation Chart this area rates as a Class C. The terrain is gently rolling interspersed with small lakes and drained by small meandering steams. Low shrubs and lichens with scattered black spruce dominate the uplands. Willows are predominant along the stream channels.

E. Wildlife:

The area surrounding the proposed drill sites supports a wide variety of animal species. The resident populations include the Mulchatna caribou herd (numbering over 200,000), moose, and predators such as wolves, wolverine, brown/black bears, lynx, fox and marten.

The Mulchatna caribou winters west of Lake Illiamna and some years within the area of the Proposed Action from November through April. This herd generally moves north in late April and May. There were approximately 30,000 animals concentrated during the post calving aggregation in July in and adjacent to the project area. It is unknown whether they have moved to other portions of the herd range at this time (08/04/2004) and may be still present.

Moose occur in the areas associated with riparian willow shrubs and mixed forest. Brown and black bears may den in winter throughout the proposed area, and

concentrate their activities on rivers and streams during salmon runs. Bears will be focused on berry crops during the period of proposed activity. The resident and migrant land birds nest and feed in shrub and forest habitats and will be in migration during the proposed activity or will have left Alaska. The pothole lakes and ponds of the entire region support one of the highest densities of breeding and migrating ducks, geese and shorebirds in the state and these will be migrating through the proposed area from August through October.

IV. ENVIRONMENTAL CONSEQUENCES

A. <u>Impacts of the Proposed Action</u>:

1. <u>Critical Elements</u>:

a. Cultural Resources:

No cultural resources are known for the Proposed Action. There is a potential for previously undiscovered surface or buried resources, most probably isolated flake scatters and/or campsites.

b. Subsistence:

At this time of year, the Proposed Action may restrict subsistence uses, decrease the abundance of subsistence resources, alter the distribution of subsistence resources, or limit subsistence user access from currently existing conditions. This is primarily due to low elevation helicopter flights over hunting parties or groups of caribou, moose, or waterfowl in the process of being stalked.

c. Wastes, Hazardous/Solid:

Site activities will utilize fuel and other materials which contain oil and/or hazardous substances which, when improperly managed, can cause degradation of all aspects of the affected environment. These materials may include, but are not limited to gasoline, diesel fuel, heating oil, propane, batteries, oil/grease, and pesticides (insect repellant).

Site occupants will generate wastewater, to include human waste. If improperly managed, wastewater has the potential to pollute nearby water and create other human health issues.

Non-hazardous solid waste (trash) will be generated. If improperly managed, solid waste has the potential to attract disease vectors, such as flies and and rodents. It also has potential to attract scavenging animals, such as bears, foxes, coyotes, or wolves which can present a human safety issue.

Drilling mud can contain oils and toxic metals. Drilling mud is very mobile with fine particle size, if improperly managed, i.e. released to the environment, the drilling mud can pollute ground and surface water, and have a negative impact on vegetation, animal, and human health.

d. Wetlands/Riparian Zones:

Extremely soft boggy wetland areas could be damaged if the support beams fail to support the drill weight, fuel barrels or foot traffic around the drill site.

2. Recreation:

Hunting parties could be disturbed by helicopter operations while hunting. Also movements of game, such as caribou, could be changed by drilling activities to the point that hunters would have to move to new locations to hunt.

3. Vegetation:

Vegetation would suffer some crush damage by the drill support beams, mud containers, foot traffic, or fuel containers. Some vegetation could be covered dispersing the drill cuttings around the drill site.

4. Visual Resources:

The impacts from the drilling proposal are expected to be minimal since no vegetation will be removed except in the immediate area of the drill hole. Drill cuttings and drill mud dispersed about the site could be visible until it is dissipated by rain and snow melt.

5. Wildlife:

Helicopter and drilling operations could cause temporal displacement of caribou at this high human use period of the year. The work crew(s) may encounter black and brown bears while working in the area. Bears will be widely dispersed and feeding on berries and animal remains left by hunters during the fall hunts. Bears feeding on fall berries, may visit drill sites looking for food. Bear encounters may result in the killing of bears for defense of life and property or injury or death to members of exploration crews.

Intensive helicopter traffic may cause caribou to avoid the area or displace to other areas, possibly affecting sport hunters who planned to hunt the area or have already been dropped off in the general area of drilling operations.

B. <u>Impacts of the No Action Alternative</u>:

Under the No Action Alternative, there would be no impacts to existing resources.

C. Cumulative Impacts:

There are no cumulative impacts for the Proposed Action or the No Action Alternative.

D. <u>Mitigation Measures</u>:

Wildlife:

Helicopter operations should avoid areas where concentrations of caribou are encountered or known to be. Flight operations transporting personnel and equipment to drill sites should be at a minimum of 1,500 feet above ground level and 1,500 feet laterally from wildlife. Avoid hunting parties in the field by the same flight elevations.

V. CONSULTATION AND COORDINATION:

A. <u>Individuals and Agencies Consulted</u>:

The State of Alaska Department of Natural Resources has no objection to this project being conducted.

B. List of Preparers:

Dave Kelley, Natural Resources Specialist - Lead Preparer Jeff Denton, Wildlife Biologist
Donna Redding, Archaeologist
Mike Scott, Fisheries Biologist
Jake Schlapfer, Recreation Planner
Bruce Seppi, Wildlife Biologist
Larry Beck, Environmental Protection Specialist

Brian Sterbenz, Fire Management Specialist